

memorandum

27569

DATE: MAR 14 1994
REPLY TO:
ATTN OF: EM-453 (J. Ciocco, 903-7459)
SUBJECT: Comments for Rocky Flats Draft Phase I Remedial Field Investigation/Remedial Investigation Technical Memorandum Number 1, Inside Building Closures (Operable Unit 15), February 1994
TO: B. Fitch, Rocky Flats Office

The Office of Southwestern Area Programs, Rocky Flats (RF) Branch, has reviewed the "Draft Phase I Remedial Field Investigation (RFI)/Remedial Investigation (RI) Technical Memorandum Number 1, RF Plant, Inside Building Closures (Operable Unit 15)" February 1994, document. Please address the attached comments during the document finalization process.

Our main concern with the document is as follows:

Section 7 indicates that upon receipt of comments this document will be modified and the title changed to "Draft Phase I RFI/RI." The document is not presently formatted as required in the Interagency Agreement. Specifically, the document does not contain a Preliminary Site Characterization, Baseline Risk Assessment, or Environmental Evaluation. If Rocky Flats Plant has been provided direction from the regulators that this information is unnecessary for this report, then the document introduction should include the appropriate references.

Please contact me at 301-903-8191 or Jeff Ciocco at 301-903-7459 if you have any questions regarding these comments.

for *Jeff Ciocco*
Adtar Rampertaap
Chief
Rocky Flats Branch
Rocky Flats/Albuquerque Production Division
Office of Southwestern Area Programs
Environmental Restoration

Attachment

cc w/Attachment:
R. Schassburger, RF
S. Grace, RF

cc w/o Attachment:
C. Gesalman, EM-453

ADMINISTRATIVE

47410412

DOCUMENT REVIEW: DRAFT PHASE I Remedial Field Investigation/Remedial
Investigation TECHNICAL MEMORANDUM NUMBER 1, ROCKY FLATS PLANT, INSIDE
BUILDING CLOSURES
(OPERABLE UNIT 15)
PUBLISHED: FEBRUARY 1994

GENERAL COMMENTS

1. The source of beryllium contamination and how this contamination is to be addressed should be further explained. Although beryllium is detected at several Individual Hazardous Substance Sites (IHSSs), the document concludes that such beryllium (see Specific Comment 11) will not affect pursuing clean closure and should be addressed as a general building concern. Please elaborate as to how the beryllium contamination will be addressed and how the data collected during this action will be incorporated into further investigations. Clean closure of the IHSSs may be inappropriate before the beryllium contamination issue is resolved.
2. The report presents two instances, Specific Comments 7 and 10, where detection levels were higher than the screening levels. The report should discuss whether these detections were the result of the screening level being reduced after the surveys or if proposed detection limits were not achieved during this investigation.
3. The engineering drawings in Figures 2-2 to 2-20 are presented without a scale. Please provide the scale for each drawing.

SPECIFIC COMMENTS

1. Section 1.4, page (p.) 1-5, last paragraph, first sentence: The sentence states that Section 2.0 of this document summarizes the Field Sampling Plan. However, the section summarizes only the quantity and location of the samples collected during the Phase I Resource Conservation and Recovery Act Facility Investigation (RFI)/Remedial Investigation (RI) process and the rationale for the sampling is essentially explained in Section 3. The text would be much clearer if Section 2 is merged into Section 3.
2. Section 2.4, p. 2-8, second paragraph: Please provide a summary table showing the results of the quality control sampling. The listing in Section 3 does not provide a specific break-out providing these sample results..
3. Section 2.5, p. 2-10, first paragraph: Please clarify the system limitations that did not allow for input of sample locations. If the system was unable to track sample locations, then please explain how this information will not be "lost" over time.

4. Section 3.0, p. 3-1, second paragraph: If possible the data presented in the tables should be identified as validated or invalidated. If this report is going to be used for making the decision not to conduct planned field work, then representation of invalidated data is necessary to adequately evaluate the decision for No Further Action at these IHSSs.
5. Section 4.0, p. 4-1, first paragraph: Please clarify the purpose of the screening process that is used. It appears that the screen is to both include and exclude contaminants of concern, but the process is not well described.
6. Section 4.0, p. 4-1, second paragraph: Please clarify the last sentence in this paragraph. Specifically identify what constitutes "chemical quality assurance reasons."
7. Section 4.0, p. 4-2, last paragraph: The text indicates that the fixed alpha and beta-radiation survey will not be evaluated further because of the high detection limit and the variability of the results. This decision raises the question concerning the original goals and data quality objectives of the fixed alpha-and beta-radiation survey. Please clarify.
8. Section 5.1, p. 5-6, last paragraph: This paragraph indicates that a more conservative dust-loading value (Hawley, 1985) is used instead of the Nuclear Regulatory Commission (NRC) approach. Please explain why a more conservative dust load value is used, (i.e., does the NRC approach cause unacceptable uncertainty or risk).
9. Section 6.2, p. 6-3, second paragraph: The chemical constituent bis(2-ethylhexyl)phthalate (DEHP) detected is interpreted to be the result of the use of plastic components in the hot water rinsate. If the interpretation has not been tested by sampling the water in contact with plastic component, then DEHP should not be eliminated as a chemical of concern. If this has been done, then the results of the study should be referenced in the text.
10. Section 6.4.1.1, p. 6-7, third paragraph, second sentence: The sentence states that the method detection limit for beryllium is substantially above the screening level. As shown in Table 5-3, the noncarcinogenic screening level is 9660 mg/kg and carcinogenic screening level is 1.24 mg/kg. It is unclear why the method detection limit is substantially above these levels. Please indicate the method detection limit. In addition, if the method detection limit is substantially higher, the function of the conservative screening level is unclear. Please clarify.
11. Section 6.4.1.1, p. 6-7, third paragraph: The text states that the beryllium may be associated with other operations in Building 865 and is not associated specifically to IHSS 179; therefore, "further action on beryllium contamination should not be required to clean close IHSS 179."


The same conclusions are also drawn for other IHSSs discussed in this technical memorandum. Regardless of the source of the contamination, it is not clear how clean closure could be reached if the IHSSs have been contaminated. Please clarify.

12. Table 6-1, p. 6-25: The footnoted information and corresponding text recommendations indicate that additional activity is going to take place at IHSSs 211 and 217. Therefore, the use of No Further Action for these IHSSs is misleading. The recommendations presented for action should be detailed and a schedule presented for accomplishing those actions attached. Specifically provide how the soil surrounding the 881 footing drain will be studied and the schedule for fume hood and lab table removal.
13. Section 7.0, p. 7-1: It is proposed that "upon resolution and incorporation of all comments on Technical Memorandum Number 1, the revised document will be submitted as the Draft Phase I RFI/RI Report for Operable Unit 15." Section 3.0 indicates that the results presented in the section contain invalidated data and the data will be incorporated into the Phase I RFI/RI Report after the data validation process. In addition, the Interagency Agreement requires that the Draft Phase I RFI/RI Report must contain a Baseline Risk Assessment (BRA). Please indicate how the incorporation of the newly validated data will fit into the schedule, which indicates that a report will be ready by April 8, 1994, and whether a complete BRA will be performed after the completion of data validation.

AMER REVIEW OF TECHNICAL DOCUMENTS

AMER
Form 91-01
Rev. 2; 05/13/92

REVIEW COMMENT RECORD

Document Reviewed (Title, Number, Revision, Date, etc.)			Reviewer: R. Hyland Signature:  Date: March 1, 1994 Phone: x2136 Organization: DOE-ER/RFO		Agreement with Dispositions: Date: Reviewer: Document Preparer:	
Draft TM-1 for OU-15, Phase I RFI/RI RFP/ER-OU-15.01-TM.01-93 February, 1994						
*Comment Type: E = Essential (agreement must be documented for other than verbatim incorporation); S = Suggested; Non-C = Nonconcurrency						
Comment No.	Comment Type*	Sect./Para No.	Comment	Disposition		
1	E	General	The document does not appear to have included any provisions for including preparation and acceptance or approval signatures. This is also true with respect to the drawings. Will this be included with the final version?			
2	E	General	The draft document does not include the foundation documentation, sample forms, logs field notes, etc., that support the analysis, conclusions and/or recommendations included in the TM. Will this field data be included?			
3	E	General	The document has two sets of page numbers, one in the header for each section and the other in the footer. This is confusing.			
4	E	General	There appear to be no page numbers associated with the tables.			
5	S	TOC	Pages vi & vii - List of Acronyms appears to be incomplete, i.e., RPT. Capitalization for "RT" and "VOC".			
6	S	TOC	Page viii - Additional material is referenced in the document, i.e., DOE Orders, 10 and 29CFR, SOPs, et al. Will these documents be added to the List of References?			
7	E	2.2.3	Page 2-7, 2nd para. - Beta and gamma dose rate surveys are identified as being performed at a distance of 30 cm. or less. How much less? Distance can skew your data appreciably and the range of distances should be specified.			
8	S	2.5	Page 2-9, 2nd para. - Small point but what happens when there are 4 numerical characters in the IHSS, i.e., 117.1?			
9	S	3.0	Page 3-1, 2nd para. - The last sentence confuses me.			

AMER REVIEW OF TECHINICAL DOCUMENTS

REVIEW COMMENT RECORD CONTINUATION SHEET

Document Reviewed (Title, Number, Revision, Date, etc.)		Reviewer: R. Hyland	Agreement with Dispositions:	
Draft TM-1 for OU-15, Phase I RFI/RI RFP/ER-OU-15.01-TM.01-93 February, 1994		Date: March 1, 1994	Date: x2136	Date:
		Organization: DOE-ER/RFO	Reviewer:	Reviewer:
			Document Preparer:	Document Preparer:

Comment No.	Comment Type*	Sect./Para No.	Comment	Disposition
10	E	3.0	Page 3-2, 1st para. - I found the write-up to be a bit confusing. What I think that you are saying is that the sample activity was converted to a concentration per m ² of surface area and then based upon 560 mg of dust per m ² converted to a concentration of contaminate of concern per unit of dust and that this concentration varies with the type of contaminate. I recommend that you make these conversion calculations a bit more understandable.	
11	E	3.1.1	Page 3-3, 1st para. - CO ₂ is identified as a VOC. Is this a misprint, typo, etc.	
12	S	3.3.2	Page 3-8, 1st para., last sentence - Bad wording.	
13	S	3.4.2	Small point but how will the requirement for full face respirators and Anti-Cs be viewed relative to a "No Further Action Justification"?	
14	S	3.4.3	Page 3-11, 1st sentence - Small point again but you may want to reiterate why the post rinsate samples were not obtained	
15	E	3.6.1	Page 3-14, 2nd para. - Disagree with the write-up. UBCs are associated with specific IHSSs. Is the drain associated with OU-9, OPWL? If so, then there should be a specific UBC designator. If the line goes into a Build 881 drain tank and no problem exists then there will be no UBC. The specific UBC should be referenced.	
16	E	Tables	As a general comment - The term "Test Group" is identified but not defined anywhere in the document, i.e., "BNACLP."	
17	E	Tables	As a general comment - The term "Qualifier" is identified but no definition could be found in the document.	

AMER REVIEW OF TECHINICAL DOCUMENTS

REVIEW COMMENT RECORD CONTINUATION SHEET

Document Reviewed (Title, Number, Revision, Date, etc.)	Reviewer: R. Hyland	Agreement with Dispositions:
Draft TM-1 for OU-15, Phase I RFI/RI RFP/ER-OU-15.01-TM.01-93 February, 1994	Date: March 1, 1994 Organization: DOE-ER/RFO	Date: Reviewer: Document Preparer:
Phone: x2136		

Comment No.	Comment Type*	Sect./Para No.	Comment	
18	E	Tables	As a general comment - The headers are not properly lined up with the values.	
19	E	Tables	As a general comment - The "(l) - Calculated assuming 560 mg dust per square meter" footnote leaves a bit to the imagination as to where it comes from or how it is achieved. See #10 above.	
20	E	Tables	As a general comment - The term "Error" is used but not defined or stipulated in some other manner. Is this term "±"? Is it in % or some other units? Please define.	
21	E	Tables	As a general comment - There are many instances where the "Post-Rinsate Smear Sample" values are higher than the "Pre-Rinsate Smear Sample" values. This is confusing and no explanation for this is provided anywhere in the document. Please explain somewhere.	
22	E	Tables	As a general comment - The "Detection Limit" is missing for some COCs. Is this by intent or omission? Please explain.	
23	S	Tables	As a general comment - There are instances where the table is multi-paged and the "Building," "Room" and "HHS" are not carried over to the additional pages. This is also true for the footnotes on the initial pages of multi-paged tables. A small point but it does make for easier reading.	
24	E	Tables	There are instances where table data is identified as being input manually ("**"). Will this also be true for the final version of this document?	

AMER REVIEW OF TECHNICAL DOCUMENTS
REVIEW COMMENT RECORD CONTINUATION SHEET

Document Reviewed (Title, Number, Revision, Date, etc.) Draft TM-1 for OU-15, Phase I RFI/RI RFP/ER-OU-15.01-TM.01-93 February, 1994			Reviewer: R. Hyland Date: March 1, 1994 Phone: x2136 Organization: DOE-ER/RFO	Agreement with Dispositions: Date: Reviewer: Document Preparer:
---	--	--	--	--

Comment No.	Comment Type*	Sect./Para No.	Comment	
25	E	Tables	Table 3.4-3 for IHSS 204 does not have any data in the "Post-Rinsate . . ." columns. The reason(s) for this should be explained somewhere on the table or on the table page.	
26	E	Tables	Tables 3.5-2 and 3.6-2 have data missing. Is this by choice or by chance? If by choice please provide some form of explanation.	
27	S	4.0	Page 4-2, 2nd para. - As it is currently understood, the data presented in this document is complete but not completely validated.	
28	E	5.0	Page 5-1, last para. - The document should state that the levels of exposure utilized apply to the general public or to occupational/radiation workers.	
29	S	5.0	Page 5-2, 1st para. - As it is understood, the risk based approach cited is for occupational workers and utilizes the 1x10 ⁻⁶ criteria for each COC but not the CDH approach of 1x10 ⁻⁶ for all the COCs. Is this understanding correct? If so then occupational workers should be identified. If not the general public should be identified.	
30	E	5.1	Page 5-2, 1st para., last sentence - NRC, DOE and AEC documents are identified but not specified. What are the specific documents?	
31	S	5.1	Page 5-3, 2nd para. - Recommend that the last sentence be changed to read as follows: "These standards . . ."	
32	E	5.1	Page 5-3, List of Standards: Capitalization?? Is it 10CFR20, App. B?	

AMER REVIEW OF TECHNICAL DOCUMENTS
REVIEW COMMENT RECORD CONTINUATION SHEET

Document Reviewed (Title, Number, Revision, Date, etc.) Draft TM-1 for OU-15, Phase I RFI/RI RFP/ER-OU-15.01-TM.01-93 February, 1994		Reviewer: R. Hyland Date: March 1, 1994 Phone: x2136 Organization: DOE-ER/RFO	Agreement with Dispositions: Date: Reviewer: Document Preparer:
---	--	--	--

Comment No.	Comment Type*	Sect./Para No.	Comment
33	E	5.1	Page 5-3, last para.- The dose-rate standards listed are for Radiation Workers. This should be specified.
34	E	5.1	Page 5-4, 1st para. - As I understand it, minors are not allowed to receive any occupational exposure. According to 10CFR20 the legal limit is expressed as 5N-18, where N is the age of the individual. Please explain.
35	E	5.1	Page 5-4, 1st para. - Are Radon and its daughter products COCs? There are massive amounts of concrete and trace amounts of uranium present, which should produce some Rn.
36	E	5.1	Page 5-6, No. 2 - Th ²³⁴ is a product of the U ²³⁸ decay process and is also a β-emitter. Does this element need to be considered.
37	S	5.1	Page 5-6, No. 3 - The term "standard worker" is used and the term "occupational worker" is used other places and interchangeably with the term "radiation worker." All this differing terminology tends to confuse the average stakeholder.
38	E	5.2	Page 5-7, 1st para. - What is the relationship of this section with 29CFR1910, 6CCR1007 and with DOE orders/guidance, etc.?
39	E	Table 5-2	Page 5-14 - This table appears before Table 5-1 and therefore it appears to be out of place. Additionally, it would be somewhat easier to understand if the parameters were defined and just not abbreviated.
40	S	6.3.1.1	Page 6-4, Step 1 - It might be more meaningful if this information was displayed in some manner to show that this is, in fact, the case.

AMER REVIEW OF TECHNICAL DOCUMENTS

REVIEW COMMENT RECORD CONTINUATION SHEET

Document Reviewed (Title, Number, Revision, Date, etc.)		Reviewer: R. Hyland		Agreement with Dispositions:	
Draft TM-1 for OU-15, Phase I RFI/RI RFP/ER-OU-15:01-TM.01-93 February, 1994		Date: March 1, 1994 Phone: x2136 Organization: DOE-ER/RFO		Date: Reviewer: Document Preparer:	

Comment No.	Comment Type*	Sect./Para No.	Comment	
41	E	6.4.1.1	Page 6-7, 2nd para. - Building 865 is currently one of the four buildings identified for the NCPP economic conversion effort. You may want to include this in the statement pertinent to the beryllium contamination. The other ED buildings are 444/447 and 883. IHSSs - 178, -179 and -204 are the OU-15 constituents involved.	
42	E	6.6.1.2	Page 6-16, 1st sentence - Rather than "handling" the term "processing" may be more appropriate.	
43	E	6.6.1.2	Page 6-16, last sentence - This statement may be inappropriate here. Since this is a RCRA unit that has been out of operation for well over a year, some form of extraordinary effort will be required to recommence the operation of the unit. It would appear that possibly some form of radiological and/or hazardous constituent screening will be needed. This should be addressed in this TM.	
44	S	6.6.1.3	Page 6-16 - This section may have to be rewritten to reflect the real world.	
45	E	6.8.1.3	Page 6-23 - Unit 32 is a RCRA unit that also has been shutdown for a considerable period of time. If the intentions are to use this unit for purposes that are currently not covered by the RCRA Permit possibly closure will be needed prior to operation.	
46	E	Table 6-1	Page 6-25, Footnote 4 may have to be modified or removed.	
47	S	7.0	The accelerated approach may need to be mentioned here. The Ph I, Draft RFI/RI is due August 1, 1994 per the IAG.	